

CHAPTER III

METHOD OF THE RESEARCH

A. The Research Design

The research design is a quasi-experimental research. According to Gay and Airasian, in order to receive permission to use school children in a research, a researcher often has to agree to keep students in existing classrooms intact.⁴⁵ Thus, entire classrooms, not individually, are assigned to treatments. This design is referred to a quasi-experimental design. In this research, the writer used pre- and posttest design. In conducting this research, two classes of the second year students of MTs Ponpes Darel Hikmah Pekanbaru were participants. The writer assigned the experimental and control class, administered a pretest to both groups, conducted experimental treatment activities only with the experimental group and then administered a posttest in order to assess the differences between the two groups. According to Campbell and Stanley, the research design can be illustrated as follows:⁴⁶

Table III.1
Research Design

Class	Pretest	Treatment	Posttest
Experiment	O ₁	X	O ₂
Control	O ₃	-	O ₄

⁴⁵ L. R. Gay and Peter Arisian. *Educational Research Competencies for Analysis and Application 6th Edition*. (New Jersey: Prentice Hall, Inc, 2000), p. 394

⁴⁶ Donald T. Campbell and Julian C. Stanley. *Experimental and Quasi-Experimental Design for Research*, (Detroit: Houghton Mifflin Company, 1963), p.47

B. The Time and the Location of the Research

The research was conducted at MTs Ponpes Darel Hikmah Pekanbaru. It was located at Soebrantas Street No. 12 Pekanbaru. It was conducted from April to May 2014.

C. The Subject and The Object of The Research**1. The Subject of the Research**

The subject of this research was the students of the second year students at MTs Ponpes Darel Hikmah Pekanbaru.

2. The Object of the Research

The object of this research was the effect of listening passage preview technique on students' reading fluency.

D. The Population and the Sample of the Research

The population of this research was the second year students of MTs Ponpes Darel Hikmah Pekanbaru in 2013/2014 academic year which consisted of 10 classes and the number of students for this level were 289 students.

Table III.2
The Total Population of the Second Year Students
at MTs Ponpes Darel Hikmah Pekanbaru in 2013/2014

No.	Class	Population		Total
		Male	Female	
1	VIII A1		26	26
2	VIII A2		35	35
3	VIII A3		33	33
4	VIII A4		35	35
5	VIII A5		26	26
6	VIII B1	36		36
7	VIII B2	27		27
8	VIII B3	30		30
9	VIII B4	30		30
10	VIII B5	29		29
Total		152	155	307

Based on the research design, the researcher took two classes for the samples by using cluster sampling. Cluster sampling technique refers to sampling taken randomly which the members have the similar characteristics.⁴⁷ Moreover, each individual has an equal chance of being selected.⁴⁸ The experimental class was VIII A1 that contained 26 students and the control class was VIII A5 that contained also 26 students.

⁴⁷ L. R. Gay. *Op.Cit.*, p.349

⁴⁸ Frederick J Gravetter and Lori-Ann B. Forzano. *Research Methods for the Behavioral Science*. (USA: Linda Schreiber-Ganstar, 2012), p.144

Table III.3
The Total Sample of the Research

No.	Class	Total
1	VIII A1	26
2	VIII A5	26

E. The Technique of Collecting Data

In collecting the data of this research, the writer used tests. Brown states that test is a method of measuring a person's ability, knowledge, or performance in a given domain.⁴⁹ In addition, Arikunto also states that test is used to measure the ability and how big the ability of the subject of research (students).⁵⁰ Based on the statement above, the writer used oral reading performance test to collect the data in order to find out the students' reading fluency based on its component: pronunciation, intonation, rhythm, pausing, and stress.

The data of the research were gotten from pre-test and post-test. The data were collected through the following procedures:

1. The students were given a pre-test and post-test in the oral reading performance.
2. The students' reading fluency was recorded by the writer and was backed into DVD. Then, it was collected to evaluate the pronunciation, intonation, rhythm, pausing, and stress.
3. The writer used two raters to score the students' reading fluency.

⁴⁹ H. Douglas Brown, *Language Assessment*, (San Fransisco: Longman, 2003), p.3

⁵⁰ Suharsimi Arikunto, *Dasar-dasar Evaluasi Pendidikan*. (Jakarta: PT Rineka Cipta, 2009), p.223

4. The writer collected and summed up the scores from the two raters to get each student's score.

In the class, there were some terms of collecting the data, namely:

1. Pretest was given to the students in the experimental and control class. This was used to know the basic of the students' reading fluency.
2. Posttest was given to the students after giving the treatment of the technique to the experimental class and to the control class which was not given the treatment. The posttest was applied in order to know the development of the students' reading fluency after practicing listening passage preview technique.

F. Validity and Reliability of the Test

1. Validity of the Test

A test is a tool to measure the ability, knowledge, achievement or performance of person. It is pertaining to the statement stated by Brown that a test is a method to measure a person's ability, knowledge, or performance in a given domain.⁵¹ The more explanation explained also by Brown that one of criteria for testing a test is validity. A valid test should be appropriate, meaningful, and useful in term of the purpose of

⁵¹Brown, H. Douglas. *Language Assesment: Principles and Classroom Practice*. (NewYork: Pearson Education 2004), p. 3.

the assessment. The validity has three kinds, they are content validity, criterion validity, and construct validity.⁵²

In this research, the writer used content validity to prove the validity of the test. The writer used the materials tested based on the materials that they learned; recount text. It was dealt with the School Based Curriculum (KTSP) applied in students' handbooks. One of them was English in Focus; for Grade VIII Junior High School (SMP/MTs).⁵³ It was clear to explain that the tests taken for this research were valid.

2. Reliability of the Test

Reliability of the test can be measured from the consistency and dependability of the test. Relation to the statement stated by Brown, he stated that a reliable test is consistent and dependable. Of course, the consistency and dependability of the test can be measured through the scores given. It is one of the ways provided by Brown. There are some factors influencing the reliability of the test result stated by brown, they are: student-related reliability, rater reliability (Inter-rater reliability and Intra –rater reliability), test administration reliability, and test reliability.

In this part, the researcher tried to measure the reliability of the test through the rater reliability, specifically in inter-rater reliability. The writer chose inter-rater reliability because the scores gotten from the

⁵² Gay, L.R., and Peter Airasian. p. *Loc. Cit.*, p. 163-167.

⁵³ Artono Wardiman, dkk. *English in Focus; for Grade VIII Junior High School (SMP/MTs)*, (Pusat Perbukuan Departemen Pendidikan Nasional, 2008)

test is evaluated by two raters, of course, the scores given were different. The writer wanted to find out the reliable of the test through the scores scored by two raters. The writer used the SPSS 16 version to find the reliability of the test based on Alpha Cronbach technique. The result is shown on the table below:

Table III.4

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,832	,835	2

Based on the previous table, it was clear that the reliability value was 0.832. According to Pallant, if Cronbach's Alpha is above 0.7, the scale can be considered as reliable to our sample.⁵⁴ It means that the test was reliable.

G. Homogeneity of the Data

According to Siregar, the purpose of homogeneity test is to know whether the object of the research has the same variance or not. The method used in this test was comparing the biggest variance with the smallest one.⁵⁵

⁵⁴Julie Pallant, *SPSS Survival Manual; A Step by Step Guide to Data Analysis Using SPSS for Windows (Version 10 and 11)*, (Philadelphia: Open University Press, 2001), p. 99

⁵⁵Syofian Siregar, *Statistika Parametrik untuk Penelitian Kuantitatif: Dilengkapi dengan Perhitungan Manual dan Aplikasi SPSS Versi 17*, (Jakarta: Bumi Aksara 2013), p.167

In this research, the writer assessed the homogeneity of data by using SPSS 16.0. The result of the test can be seen as follows:

Table III.5

Test of Homogeneity of Variances

score			
Levene Statistic	df1	df2	Sig.
,148	1	50	,702

From the table, it was known that the value of significance (sig.) was 0.702. According to Siregar, data are homogenous or variant when the value Sig. is higher than 0.05.⁵⁶ Based on the table, it was clear that Sig. is higher than 0.05 which indicates the homogeneity of the data. The comparison can be stated by $0.702 > 0.05$.

H. Normality of the Data

Assessing normality of data is used to describe a symmetrical, bell shaped curve, which has the greatest frequency of scores in the middle, with smaller frequency towards the extremes. Normality can be assessed by obtaining skewness and kurtosis values.⁵⁷ In this research, the writer assessed the normality of data by using Kolmogorov Smirnov test from SPSS 16 version. The result of the test can be seen as follows:

⁵⁶ *Ibid*, p. 178

⁵⁷ Julie Pallant, *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS for Windows*, (Philadelphia: Open University Press, 2003), p. 54

Table III.6

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Score	,132	52	,024	,939	52	,010

a. Lilliefors Significance Correction

The normal distribution of the data can be formulated by the comparison of T_{obtained} and T_{table} of Kolmogorov Smirnov value by 0,2270, where H_0 is accepted, if $T_{\text{obtained}} \leq T_{\text{table}}$, and H_a is rejected, if $T_{\text{obtained}} > T_{\text{table}}$.⁵⁸ From the table above, T_{obtained} is 0.132. It can be stated that $T_{\text{obtained}} = 0,132 < T_{\text{table}} = 0,2270$. It means that H_0 is accepted, thus the data distribution was normal.

I. The Technique of Data Analysis

In order to analyze the students' reading fluency in recount text, the researcher used scores of pretest and posttest of the experimental and control class. The researcher used pre-test and post-test in the classroom and reading fluency was be assessed based on school's reading assessment, while the last result of the test was analyzed statistically by using 't' test formula through SPSS 16 version.

⁵⁸ Syofian Siregar, *Op.Cit.*p.16

To answer the questions of formulation, the writer analyzed the data by using percentage of students' categories, and the last writer used 't' test formula SPSS 16 version. The result was analyzed in order to get the gain, then the researcher could conclude whether listening passage preview technique was an effective technique to improve students' reading fluency in recount text or not.